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EXAMINER	
TANG, KAREN C	

ART UNIT	PAPER NUMBER
2151	

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,267	AGRAWAL ET AL.	
	Examiner	Art Unit	
	Karen C. Tang	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-8,16,17,24-27 and 29-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-8,16,17,24-27 and 29-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

II. Claims 1, 29, and 30 rejected under the judicially created doctrine of double patenting over claims 1, 3, 6, 7, and 8 of U. S. Patent No. 6,795,709 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: US Patent (6,795,709) indicates 1) the system determines the total IP address pool. 2) Indicate the system predict a prediction of its total IP address pool and guard band to the IP address server. 3) Indicates the priority level of the IP address. 4) Indicates the handoff hosts and hand off host.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140

F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 6, 7, 29, and 30-32 rejected under 35 U.S.C. 102(e) as being anticipated by Inoue (US 6,510,153).

1. Referring to Claim 1, Inoue indicates a method for dynamically allocating Internet Protocol addresses for a wireless cell (refer to Title), comprising: determining at a system IP address server (DCHP server, refer to Col 7, Lines 50-67) a total Internet Protocol address pool for the wireless cell. (refer to Col 10, Lines 10-25, and Col 11., it is inherent that standard DHCP consists of DHCPDISCOVER function which discover all the IP address available among all the DHCP servers);

partitioning the Internet Protocol address pool into groups of address spaces for use with an associated user group within the wireless cell (refer to Col 2, Lines 5-15, Col 6, Lines 33-45);

monitoring IP types and frequency of address demands (frequency as to transmit information over one hour interval, refer to Col 10, Lines 45-67) associated with the wireless cell (refer to Col 8, Lines 34-67 and Col 9, Lines 10-60 and Col 10, Lines 1-10);

the wireless cell (mobile computer, such as wireless cell, refer to Col 2, Lines 5-48) distinguishing between time sensitive (finite leasing time, refer to Col 9, Lines 30-45) IP address demands and time insensitive IP address demands (infinite leasing time, refer to Col 10, Lines 5-10);

and the wireless cell address server updating the groups of address spaces based upon the number of the time sensitive and time insensitive demands as distinguished by the wireless cell. (every time the DHCP server reallocating the address, and when it does, it updates the gropu of address space, Col 3, Col 10, 12 and Col 13 and Col 14).

2. Referring to Claim 2, Inoue indicates that wherein said step of determining a total Internet Protocol address pool (refer to Col 11, it is inherent that DHCPDISCOVER which discover all the IP address available among all the DHCP servers). Inoue indicates the analysis (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55) allocation Internet Protocol address space for the associate user group (Home address group, refer to Col 2, Lines 5-15) within the wireless cell (refer to title and it is inherent that DHCP allocate Internet Protocol address for the user group).

3. Referring to Claim 6, Inoue discloses wherein the user group (Home Address, refer to Col 2, Lines 6-25) is one of a wireless handoff terminal (Mobile computer, refer to Col 2, Lines 7-25), a resident terminal and a wired terminal.

4. Referring to Claim 7, Inoue discloses utilizing at least one of: real-time data (message) including present network IP address demands associated with the wireless cell (refer to Col 3, Lines 1-20); non-real-time data including previous IP address demands associated with the wireless cell; call blocking parameters; quality of service and performance parameters', and third party data including third party ISP address allocation specifications, quality of service parameters or performance parameters.

5. Referring to Claim 29, Inoue discloses a system for dynamically allocating Internet Protocol addresses for wireless terminals (mobile computer 2, refer to Fig 1) in a wireless cell (Network 1b, which is a wireless network, and refer to title, and it is inherent that DHCP allocate Internet Protocol address for the user group and Col 15, Lines 40-50) in a wireless network, said system comprising: an IP address server which determines a total Internet Protocol address pool for the wireless terminals of the wireless cell (refer to Col 10, Lines 10-25, and Col 11. it is inherent that standard DHCP consists of HCPDISCOVER function which discover all the IP address available among all the DHCP servers); and a partitioned address pool of groups of address spaces for use with an associated group of wireless terminals within the cell (refer to Col 2, Lines

5-15, Col 6, Lines 33-45); and a wireless IP address agent (HA, refer to Col 1, Lines 65-67, Col 2, Lines 1-10) residing in the wireless network (radio network is a wireless network, Col 15, Lines 40-50) and including a time sensitive IP address pool (finite leasing time, which the leasing time will be expire within certain period of time, refer to Col 10);

wherein the wireless IP address agent handles requests for IP addresses from at least one of time sensitive (finite leasing time, refer to Col 9, Lines 30-45) and time insensitive (infinite leasing time, refer to Col 10, Lines 5-10) wireless terminals (mobile computers, refer to Col 1, Lines 50-60),

categorizes the wireless terminals as one of a time sensitive handoff host or a time sensitive resident host and a time in-sensitive handoff host or a time in-sensitive resident host (refer to Col 2, Lines 5-20, and Col 10, Lines 10-35)

and forwards an IP address associated with the time sensitive handoff host (Mobile computer 2, Col 9, Lines 10-67) or the time sensitive resident host to time sensitive terminal from the time sensitive IP address pool in the wireless IP address agent (home agent 5, refer to Col 7, Lines 60-65).

and forwards the IP address request associated with the time in- sensitive (leasing time to be indefinite, refer to Col 10, Lines 10-50) handoff host or the time insensitive resident host to the IP address server

and wherein the IP address server (DHCP server, refer to Col 9, Lines 45-67) monitors address demands associated with the wireless cell (refer to Col 8, Lines 34-67 and Col 9, Lines 10-60 and Col 10, Lines 1-10),

and updates the groups off address spaces based on the IP address demands (Col 12 and Col 13 and Col 14).

6. Referring to Claim 30, Inoue discloses a system for dynamically allocating Internet Protocol addresses for wireless terminals (Mobile computer 2, correspondent host, CH3, refer to Fig 1) in a plurality of wireless cells (home sites, and visiting sites, refer to Col 2, Lines 1-25, and refer to title, and it is inherent that DHCP allocate Internet Protocol address for the user group) in a wireless network (mobile computer such as cell phone, which utilize the system within a mobile environment, refer to Col 2, Lines 1-25 and Col 15, Lines 40-50), said system comprising: an IP address server which determines a total Internet Protocol address pool for the wireless terminals for each of a plurality of the wireless cells (refer to Col 10, Lines 10-25, and Col 11. it is inherent that standard DHCP consists of HCPDISCOVER function which discover all the IP address available among all the DHCP servers)

and for each of a plurality of partitioned address pools of groups of address spaces for use with an associated user group of terminals within the cells (refer to Col 2, Lines 5-15, Col 6, Lines 33-45).

and a plurality of wireless IP address agents (manager, refer to Col 9, Lines 65-67, home agent 5, Col 10, Lines 34-47)residing in the wireless network (mobile computer 2 is within the wireless network, see Title);

wherein each of the wireless IP address agents (manager, refer to Col 9, Lines 60-67) handles requests for IP addresses from a plurality of time sensitive (finite leasing time,

refer to Col 10, Lines 10-45) wireless terminals and time insensitive (leasing time from infinite, refer to Col 10, Lines 1-10) wireless terminals (computers, refer to Col 9, Lines 60-65),

categorizes each wireless terminal as one of a time sensitive handoff host or a time sensitive resident host and a time in-sensitive handoff host or a time in-sensitive resident host (refer to Col 2, Lines 5-20, and Col 10, Lines 10-35)

and forwards the IP address associated with the time sensitive handoff host (Mobile computer 2, Col 9, Lines 10-67) or the time sensitive resident host to time sensitive terminals from a time sensitive IP address pool in the wireless IP address agent (home agent 5, refer to Col 7, Lines 60-65).

and forwards the IP address request associated with the time in- sensitive (leasing time to be indefinite, refer to Col 10, Lines 10-50) handoff host or the time insensitive resident host to the IP address server.

7. Referring to Claim 31, Inoue indicates a system for dynamically allocating Internet Protocol addresses (refer to title) for wireless cell (network 1b, refer to Fig 4) in a communication network including wireless and wireline terminals (fixed PC, refer to Col 2, Lines 20-36, and Mobile computer, refer to Col 1, Examiner interprets the mobile computer can be a form of cell phone), wireless address agents (HA, refer to Fig 4), and a system IP address server (DCHP server, refer to Col 9),

Said system IP address server including a wireless handoff IP address pool, a wireless resident IP address pool, and a wired terminal IP address pool and a predictive analysis for allocating IP address between said pools; and

Said wireless IP agents (refer to Fig 12) including a time-sensitive IP address pool which receives an allocation of addresses from said system IP address server and a classification process which determines if a wireless terminal requesting an IP address is a time-sensitive host or a time insensitive host (refer to Col 9 and 10), said wireless IP agent directly forwarding to the requesting wireless terminal an IP address from its time-sensitive IP address pool if the requesting terminal is a time-sensitive IP address pool if the requesting terminal is a time-sensitive host and forwarding the request to the system IP address server if the requesting terminal is a time insensitive host (refer to Col 10, when mobile computer satisfy certain condition, then the mobile computer will be the time insensitive host, otherwise, it will be time sensitive host, and then, by determine whether or not the host has satisfy the conditions, the type of leasing of IP address will be sent out accordingly from the IP address pools.).

8. Referring to Claim 32, Inoue indicates a system for dynamically allocating Internet Protocol addresses (refer to title) for wireless cell (network 1b, refer to Fig 4) in a communication network including wireless and wireline terminals (fixed PC, refer to Col 2, Lines 20-36, and Mobile computer, refer to Col 1, Examiner interprets the mobile computer can be a form of cell phone), wireless address agents (HA, refer to Fig 4), and a system IP address server (DCHP server, refer to Col 9),

Said system IP address server predictively allocating IP addresses to a wireless handoff IP address pool (address pool in the Network 1c, refer to Fig 1), a wireless resident IP address pool (address pool in Network 1b, refer to Fig 1), and a wired terminal IP address pool (address pool in Network 1a, refer to Fig 1) and forwarding to time sensitive address pools in said wireless IP address agents IP addresses (refer to Col 2, 3 , 9 and 10);

Each wireless IP agent upon receiving a request for an IP address from a wireless terminal determining if said request is time sensitive or time in-sensitive (refer to Col 9 and 10);

If said request is time sensitive, said wireless IP agent directly providing to said requesting wireless terminal an IP address from its time sensitive IP address pool (refer to Col 9 and 10); and

If said request is time in-sensitive, said wireless IP agent forwarding said request to said system IP address server (refer to Col 9, and 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al hereinafter Inoue (US 6,510,153) in view of Douglas E. Comer hereinafter Comer (INTERNET WORKING with TCP/IP Principles, Protocols, and Architectures).

1. Referring to Claim 3, Inoue indicates the analysis being performed (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55)

Inoue does not expressly indicate the analysis is using the moving weighted mean average.

Comer indicates moving weighted mean average (refer to Pg 237).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate moving weighted mean average function with their analysis.

The suggestion and motivation would have been that provide more accurate result/outcome for any random function such as selecting/allocating addresses.

2. Referring to Claim 4, Inoue indicates the analysis being performed (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55). Inoue indicates the user group (refer to Col 2, Lines 1-25).

Comer wherein said moving weighted average comprises the steps of: recording an average number of requests from hosts in each user group; and computing an average number of total IP addresses over a suitable fixed period of time (definition of moving weighted mean average, refer to Pg 237).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate moving weighted mean average function with their analysis.

The suggestion and motivation would have been that provide more accurate result/outcome for any random function such as selecting/allocating addresses.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al hereinafter Inoue (US 6,510,153) in view of Ford et al hereinafter Ford (US 6,101,499).

1. Referring to Claim 8, Inoue discloses mobile host (mobile computer 2, refer to Col 8, Lines 5-20) requesting an IP address and discloses handoff mobile host (Care of Address) and resident mobile host (Home address, refer to Col 8, Lines 39-60).

Inoue does not expressly indicate the priority to the hosts.

Ford discloses priority to the host. (refer to Col 3, Lines 28-45)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to indicate the priority of the hosts. The suggestion/ motivation for doing so would have been that it would create the order among the communication system of who would have the privilege to receive IP addresses when the bottleneck occurs. It would reduce the delay time and provide the better environment for the users.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

> invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 16, 17, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al hereinafter Inoue (US 6,510,153) in view of Jiang (refer to US 6,857,018).

1. Referring to Claim 16, Inuoe discloses dynamic address allocation in wireless system (refer to title) with appropriate the predictive analysis (refer to Col 9 - 15).
Inoue does not expressly indicate the guard bands.
Jiang discloses a guard bands that consists a minimum IP addresses requirement (refer to Col 6, Lines 20-30).
At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine both arts. The suggestion/motivation for doing so would have been that the Inoue indicate the upper limit for the amount of IP addresses within the network (refer to Col 10, Lines 10-35). To set a minimum IP addresses available in the system could ensure that the IP addresses would always be available in the case of emergency.

2. Referring to Claim 17, Inoue discloses a method for dynamically allocating Internet Protocol addresses for a wireless cell (refer to title, and it is inherent that DHCP allocate Internet Protocol address for the user group), comprising:
performing at a system IP address server (DHCP server, refer to Col 9, Lines 45-67) a predictive analysis (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55) to allocate

Internet Protocol address space for an associated user group within the cell (Home address group, refer to Col 2, Lines 5-15); partitioning the Internet protocol address space into groups of address spaces for use with an associated user group based on the predictive analysis (refer to Col 2, Lines 5-15, Col 6, Lines 33-45); distinguishing at the wireless cell (network 1b, refer to Fig 1) between time sensitive IP address (finite leasing time, refer to Col 9, Lines 30-45) demands and time insensitive (infinite leasing time, refer to Col 10, Lines 5-10) IP address demands, the IP address server updating the Internet Protocol address space in response to said distinguishing step; (Col 12 and Col 13 and Col 14); and establishing guard bands for the device categories to ensure a minimum number of Internet Protocol addresses are available for the device categories. Inoue does not expressly indicate the guard bands.

Jiang discloses a guard bands that consists a minimum IP addresses requirement (refer to Col 6, Lines 20-30).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine both arts. The suggestion/motivation for doing so would have been that the Inoue indicate the upper limit for the amount of IP addresses within the network (refer to Col 10, Lines 10-35). To set a minimum IP addresses available in the system could ensure that the IP addresses would always be available in the case of emergency.

3. Referring to Claim 24, Inoue discloses wherein the device categories comprises at least one of wireless devices during handoff, (Mobile Computer, refer to Col 2, Lines 6-25) resident wireless devices and wired devices.

4. Referring to Claim 25, Inoue discloses a guard band base on the analysis (refer to Col 10, Lines 10-35)

Inoue does not disclose adjusting the guard bands.

Jiang discloses adjusting the guard bands (refer to Col 6, Lines 15-55)

At the time of the invention, it would have been to a person of ordinary skill in the art to indicate the adjusting the guard bands.

The suggestion/motivation for doing so would have been that by adjusting the guard bands depends on the amount of utilization of the IP address, it would free up a lot of spaces and speed up the processing within the system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al hereinafter Inoue (US 6,510,153) in view of Jiang (refer to US 6,857,018) in further view of Douglas E. Comer hereinafter Comer (INTERNET WORKING with TCP/IP Principles, Protocols, and Architectures) and "Official Notice".

1. Referring to Claim 26, Inoue indicates the analysis being performed (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55)

Inoue does not expressly indicate the analysis is using the moving weighted mean average.

Comer indicates moving weighted mean average (refer to Pg 237).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate moving weighted mean average function with their analysis.

The suggestion and motivation would have been that provide more accurate result/outcome for any random function such as selecting/allocating addresses.

2. Referring to Claim 27, Inoue indicates the analysis being performed (refer to Col 14, Lines 33-67 and Col 15, Lines 1-55). Inoue indicates the user group (refer to Col 2, Lines 1-25).

Comer wherein said moving weighted average comprises the steps of: recording an average number of requests from hosts in each user group; and computing an average number of total IP addresses over a suitable fixed period of time (definition of moving weighted mean average, refer to Pg 237).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate moving weighted mean average function with their analysis.

The suggestion and motivation would have been that provide more accurate result/outcome for any random function such as selecting/allocating addresses.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 6,510,153) in view of "Official Notice".

1. Referring to Claim 33, Inoue indicate the receiving the DCHP request message (refer to Col 9, Lines 20-67) from the wireless terminal (mobile computer, Examiner interprets the mobile computer such as cell phone.).
Inoue does not expressly indicate a predetermined byte-code in an option field
Official Notice is taken that the limitation narrowed by this claim is consider obvious.
At the time of the invention, it would have been obvious to a person of ordinary skill in the art to indicate the DCHP message option field consists of a predetermined by-code.
The suggestion and motivation is that DCHP consists of various message, it is well known in the art that the messages consist of a option field which would consists of various code.

2. Referring to Claim 34, Inoue indicates that the receiving the DCHP request message (refer to Col 9, Lines 20-67) from the wireless terminal (mobile computer, Examiner interprets the mobile computer such as cell phone.).

Inoue does not expressly indicate wherein the predetermined byte code represents a decimal number in a range of 128-254.

Official Notice is taken that the limitation narrowed by this claim is consider obvious and furthermore a matter of design choice.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to indicate the range of the IP address.

The suggestion/motivation for doing so would have been that Inoue indicate the use of dynamically usage of IP address (refer to TITLE), and by choosing the IP addresses class range between B-E is because it is much more commercially recognized due to the cheaper cost of maintenance.

Response to Arguments

Applicant's arguments filed 04/19/2005 have been fully considered but they are not persuasive.

1) In the remark, the applicant argued that (1) Applicant does not agree with the statement of the Examiner such as the DCHPDiscover Function and in Inoue system, it partition an IP address pool.

(2) Inoue does not teach or suggest total IP address pool for the wireless at the system IP address server nor partition the IP address pool into group of address space and updating the group of address spaces based upon the number of time sensitive and time insensitive demands.

(3) Combination of Comer and Inoue does not overcome the fundamental lack of relevance of the Inoue patent with applicant's invention.

(4) Does not understand the mapping of Claim 6.

(5) Due to Inoue's deficiency, cannot see the combination of Ford with Inoue and Jiang with Inoue.

(6) Time sensitive and Time insensitive issues.

2) Examiner respectfully traverse the argument:

Examiner is interpreting the claims language broadest possible, therefore, as to point (1) Examiner's position is supported by RFC2131 which according to the definition of DCHP (quote from RFC 2131) that "DHCP allocates network addresses and deliver configuration parameters to dynamically configured hosts (introduction, pg 2)." Inoue indicates that the DHCP server can define upper limit (maximum/total) of addresses, also, Inoue indicates the uses of DHCP messages, such as DHCPDISCOVERY, the RFC2131, Pg 21, indicates that server receives request from the client/wireless cell, the servers will choose the network address for the requesting of the client. In "INTERNETWORKING with TCP/IP" forth edition, by Comer, Pg 452, indicates that the client/wireless server contacts all the DHCP clients, which the servers will offer the clients with IP address, so that clients will receives a list of IP address.

(2) Referring to Inoue, Claim 2, Lines 5 – 55, DCHP provides the list of all IP addresses, which is a pool of IP addresses available for users, and each time the users needs a IP address (Home address), it will request an IP address to the server. When

the server dynamically allocates IP addresses, it is performing the partition function, partition the IP addresses and sent it according to the request of the clients. Also, based on the definition of DCHP, refer to RFC2131, once the "lease" time is over, the server will update the information by take back the IP address, and reuse it again (Pg 3 and 7).

(3) Since Examiner stands the ground for Inoue's reference reads on the claims of the applicants, therefore, the combination with Comers overcome Applicants disagreement.

(4) Examiner interprets the user group as the mobile users/computers utilizing the home addresses, since the applicants only indicate the user group is "ONE OF A", examiner indicates the Mobile users is the "wireless handoff terminal".

(5) Since Examiner stands the ground for Inoue's reference reads on the claims of the applicants, therefore, Ford with Inoue and Jiang with Inoue over come the Applicant's disagreement.

(6) Defintion of DCHP also indicate that in the "dynamic allocation", DHCP assigns an IP address to a client for a limited period of time (RFC 2131, Pg 3). Within RFC2131, PG 10, the definition of DHCP also indicates that the server permits the finite lease which is time sensitive, that the "lease" expire within certain time, then the IP address will no longer be valid to the client. Whether, DCHP also permits the "indefinite" lease, which is not time-sensitive, because it has no duration of when the lease will be expired.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KT

6/16/05

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER